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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/970,730	10/05/2001	Steven W. Trovinger	10013280	1262

7590 12/30/2003

HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER

DURAND, PAUL R

ART UNIT	PAPER NUMBER
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3721

13

DATE MAILED: 12/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/970,730

Applicant(s)

TROVINGER ET AL.

Examiner

Paul Durand

Art Unit

3721

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2-13 and 15-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2,3,5-13,15,16,19-23 is/are rejected.
- 7) ☒ Claim(s) 4,17 and 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☒ Interview Summary (PTO-413) Paper No(s) 12.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. The indicated allowability of claims 21 and 23 is withdrawn in view of the reconsidered reference(s) to Trovinger (WO 00/18583). Rejections based on the newly cited reference(s) follow.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 2,3,5,6-10,13,15,16,19,21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nemec (US 4,419,088) in view of Trovinger (WO 00/18583).

In regard to claims 21 and 23, Nemec discloses the invention substantially as claimed including a fold blade 31, two fold rollers 21 and 22, that rotate about an axis parallel to the longitudinal axis of the fold blade, and drive means for moving the rollers and blades (see Figs. 1, 7a, 8a and C2,L67 - C3,L58). What Nemec does not disclose is a pinch foot that clamps against the fold blade. However, Trovinger discloses that it is well known in the art of folding to provide a pinch roller 231, with a footprint that clamps against a fold blade and remains in a stationary position along the longitudinal axis as the fold rollers and blade make contact as they move relative to each other for the purpose of keeping a sheet of paper correctly aligned thereby increasing manufacturing efficiency (see Figs. 14-22 and Pg. 22,L26 – Pg. 27,L18). Therefore, it

would have been obvious to one having ordinary skill in the art to have modified the invention of Nemec with the pinching means as taught by Trovinger for the purposes of increasing manufacturing efficiency.

In regard to claims 2,5,6-10,13,15 16 and 19 Nemec discloses the invention substantially as claimed including guides 13 and 14, fold rollers 21 and 22 attached to housings 24 and 25 and rods 33 to move the blade 31, attached to couplings 35, through a plane which passes between the fold rollers. What Nemec does not disclose is the vertically adjustable rollers, However, Trovinger teaches that it is old and well known in the art of folding to provide folding flaps 230, vertically adjustable rollers 238 orthogonal to the paper, with a housing 211, attached to a coupling 216, with lead screw 215 and pinch rollers 231 elastically mounted by spring and rods 235 in between rollers 238, for the purposes of increasing manufacturing efficiency (see Figs. 14-22). Therefore, it would have been obvious to one having ordinary skill in the art to have modified the invention of Nemec with the pinching and adjusting means as taught by Trovinger for the purpose of increasing manufacturing efficiency.

In regard to claim 3, Nemec discloses the invention substantially as claimed except for the rounded folding blade. It would have been an obvious matter of design choice to use a rounded folding blade, since applicant has not disclosed that a rounded folding blade solves any stated problem or is valid for any particular purpose and it appears that the invention would perform equally well with either a flat or rounded folding blade

Art Unit: 3721

4. Claims 11,12,20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nemec in view of Trovinger and in further view of Skipor et al (US 3,954,258).

In regard to claims 11 and 12, Nemec and Trovinger discloses the invention substantially as claimed including folding flaps 230. What Nemec and Trovinger do not disclose is adjustable flaps with fold rollers attached to the flaps. However, Skipor discloses that it is old and well known in the art of folding to provide folding flaps 18 and 20 that are pivotably biased toward each other and have fold rollers 14 attached (see Fig. 1) for the purpose of increasing manufacturing efficiency. Therefore, it would have been obvious to one having ordinary skill in the art to have modified the invention of Nemec with the pinching and adjusting means as taught by Skipor for the purpose of increasing manufacturing efficiency.

In regard to claims 20 and 22, Skipor teaches that it is old and well known to provide fold rollers that rotate the axis in a different direction.

#### ***Allowable Subject Matter***

5. Claims 4,17 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

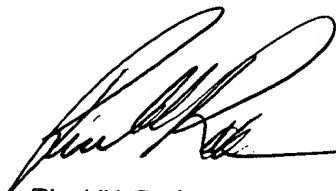
Art Unit: 3721

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Durand whose telephone number is 703-305-4962. The examiner can normally be reached on 0730-1800, Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I Rada can be reached on 703-308-2187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

Paul Durand  
December 29, 2003

  
Rinaldi I. Rada  
Supervisory Patent Examiner  
Group 3700